

Case 1872

Mucinous cystadenoma of the appendix with pseudomyxoma peritonei

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Section: Gastro-Intestinal Imaging

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Patient: 55 year(s), female

Clinical Summary

An asymptomatic patient with a cystic adnexal mass.

Clinical History and Imaging Procedures

A routine pelvic ultrasound scan detected a mixed right adnexal mass in this patient. Ultrasound examination and CT scanning of the pelvis were carried out and revealed a cystic formation, anterior to the external right iliac vessels, measuring 4cm at its longest axis. A probable adnexal origin was proposed and follow-up control was indicated. An ultrasound study, performed one year later, showed fluid in the pouch of Douglas, in addition to the cystic formation described before. A CT scan showed the cystic lesion in the RIF with the same morphological characteristics and overlapping dimensions. In this exam, it was found that the cyst was separated from the adnexa and close to the digestive structures, which suggested that it may be an enteric duplication cyst. Since there was also a considerable amount of fluid in the cul-de-sac and no aetiopathogenic explanation for it, exploratory surgery was recommended. No other pathological findings were observed in all the examinations performed. During surgery, the appendiceal origin of the cystic lesion was recognised and an appendectomy was performed.

Discussion

Appendiceal pathological cystic lesions are rare. They are estimated to occur in 0.25% of appendectomies, and to be more common in female patients and in the sixth decade.

Pre-operative diagnosis of cystic tumours of the appendix is very important. Careful mobilisation of a pathological appendix is particularly useful in large lesions and/or in malignant neoplasms in order to reduce the possibility of rupture and peritoneal cavity dissemination. Another advantage of this knowledge is the avoidance of laparoscopic interventions, as they are formally contraindicated.

The differential diagnosis of cystic masses in the right lower quadrant of the abdominal cavity is difficult mainly in post-menopausal women, in whom cystic appendiceal masses are slightly more common. In many cases the ovaries, in this age group, can no longer be individualised on sonography and a CT scan is needed to better demonstrate the regional anatomy and associated findings.

Pseudomyxoma peritonei is an unusual condition characterised by abundant mucus in the peritoneal cavity. Several definitions and diagnostic criteria have been described in the literature and suggest that this term should be used as a macroscopic description rather than a diagnosis. A specific diagnosis should be made regarding the pathology of the underlying tumour, distribution of mucin and the presence or absence of neoplastic cells in the mucus. This condition may be associated with several pathological entities, mainly mucinous neoplasms of the appendix or ovary or rarely with pancreatic tumours.

Final Diagnosis

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Figures

Figure 1



A tubular structure is identified in the right iliac fossa, with fluid density and in contiguity with the caecum. The right ovary (arrow) is seen separated from the cystic lesion.

Figure 2



The later image shows the contiguity of the cystic lesion with the bowel loops and its mobility in the pelvic cavity. It also demonstrates the separation of the cystic mass from the right ovary (arrow).



Presence of intraperitoneal fluid in the lower recesses of the peritoneum.

MeSH

Cystadenoma, Mucinous [C04.557.470.035.320.225]

A multilocular tumor with mucin secreting epithelium. They are most often found in the ovary, but are also found in the pancreas, appendix, and rarely, retroperitoneal and in the urinary bladder. They are considered to have low-grade malignant potential.

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References

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Citation

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